



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/779,819

02/18/2004

Hyung-kyoon Kim

1293.1937

6807

21171 7590 03/17/2009

STAAS & HALSEY LLP

SUITE 700

1201 NEW YORK AVENUE, N.W.

WASHINGTON, DC 20005

EXAMINER

BIBBINS, LATANYA

ART UNIT

PAPER NUMBER

2627

MAIL DATE

DELIVERY MODE

03/17/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/779,819	Applicant(s) KIM, HYUNG-KYOON	
	Examiner LaTanya Bibbins	Art Unit 2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 December 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 7-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 7-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. In the remarks filed on December 29, 2008, Applicant amended claims 1, 4 and 5, cancelled claim 6, and submitted arguments for allowability of pending claims 1-5 and 7-9.

Response to Arguments

2. Applicant's arguments filed December 29, 2008 have been fully considered but they are not persuasive.

Regarding claims 1-5 and 7-9, Applicant argues that the cited references, alone or in combination, fail to disclose checking a state of an optical disc, where the disc is checked to determine whether the disc is Fully Blanked or Minimally Blanked and a value '04' designated whether the disc is Fully Blanked or Minimally Blanked or that data ranging from a next writable address to a predetermined block is erased upon determining that the optical disc is the Minimally Blanked disc.

Examiner respectfully disagrees. Applicant's arguments do not explain how the claims avoid the references or distinguish from them. As such, Examiner maintains that the combination of AAPA, Mato, and Motohashi more than adequately provide support for the claimed limitations as indicated in the 35 U.S.C. 103(a) rejection below.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

Art Unit: 2627

the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Applicant's Admitted Prior Art (herein AAPA) in view of Mato et al. (JP 2002-183974) and further in view of Motohashi (JP 2000-030369).

Regarding claim 1, AAPA discloses a method of recording data on an optical disc in an Incremental Recording mode in which data is partially recordable, the method comprising:

determining whether the optical disc is formatted and recording data on the optical disc upon determining that the optical disc is not formatted (see Figure 1 and the discussion in paragraph [0008] where a "conventional Incremental Recording mode" is described particularly the discussion regarding operations 100 and 102),

checking a state of the optical disc in a recording management area in which disc information is recorded, the checking including checking a recording management area to determine whether the disc is Fully Blanked or Minimally Blanked (see Figure 1 and the discussion in paragraph [0008] regarding operation 101), and

determining that the optical disc is the Minimally Blanked disc in which data is erased from the recording management area to a lead-in area (Figure 1 and the discussion in paragraph [0008] regarding operation 101).

Mato, however, discloses determining that the optical disc is a Minimal Blank disc in which data is erased from the recording management area to a lead-in area and recording on a Minimal Blank disc (see the discussion in paragraph [0007]). Mato

Art Unit: 2627

further discloses the use of packet writing on a minimally blanked optical disc (see the abstract).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of packet writing on minimally blanked optical disc as disclosed by Mato into the method of recording used in AAPA. One of ordinary skill in the art at the time the invention was made would have been motivated to combine the teachings in order to reduce the amount of time needed for the blanking process as suggested by Mato in paragraph [0009].

Motohashi discloses the claimed invention except for that recording a remainder of the data other than the recorded data, is performed prior to the erasing of data ranging from a next writable address to a predetermined block (see the discussion in paragraphs [0008], [0009], [0018], and [0030] – [0032]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made that modifying the teachings of Motohashi to record a remainder of the data other than the recorded data, after the erasing would yield a predictable result. One of ordinary skill in the art at the time the invention was made would have recognized that the modification would improve similar methods in the same way.

Additionally, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Motohashi into that of AAPA and Mato. One of ordinary skill in the art at the time the invention was made would have been motivated to combine the teachings in order to easily and correctly

Art Unit: 2627

find the final packet of the track as suggested by Motohashi in paragraphs [0006] and [0007].

The combination of AAPA, Mato and Motohashi disclose the claimed invention including checking a recording management area to determine whether the disc is Fully Blanked or Minimally Blanked, as noted above, but fail to specifically show that a value of '04' designated at field 0 of the recording management area indicates whether the disc is Fully Blanked or Minimally Blanked.

However, it would have been obvious to one having ordinary skill in the art at the time the invention was made since one with ordinary skill could have pursued the known options of having any value in any field of the recording management area indicate whether the disc is Fully Blanked or Minimally Blanked with reasonable expectation of success.

Further, it would have been obvious through routine experimentation and optimization in the absence of criticality to have the disc indicating to be Minimally Blanked when a value '04' is designated at field 0 of the recording management area and the disc indicating to be Fully Blanked when a value '04' is not designated at the field 0 of the recording management area since the applicant has not disclosed that doing so solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with the configuration disclosed by the combination of AAPA, Mato, and Motohashi.

Regarding claim 2, AAPA further discloses wherein the determining further comprises outputting a recording error message upon determining that the optical disc is formatted (see operation 103 in Figure 1 and the discussion in paragraph [0008]).

Regarding claim 3, Motohashi further discloses, wherein the erasing comprises recording, after the checking of the state, data from a next address upon determining that the optical disc is a Minimal Blank disc in which data is erased from the recording management area to a lead-out area (see the discussion in paragraphs [0008], [0009], [0018], and [0030] – [0032]).

Claim 4 is drawn to the computer readable medium corresponding to the method claimed in claim 1. Therefore computer readable medium claim 4 corresponds to method claim 1, and is rejected for the same reason of obviousness as used above.

Regarding claim 5, AAPA discloses a method of recording data on an optical disc in an Incremental Recording mode, the method comprising:

determining whether the optical disc is formatted (see Figure 1 and the discussion in paragraph [0008] where a “conventional Incremental Recording mode” is described particularly the discussion regarding operation 1002);

recording data to the optical disc at a desired position upon determining that the optical disc is not formatted (see Figure 1 and the discussion in paragraph [0008] where a “conventional Incremental Recording mode” is described particularly the discussion regarding operation 102).

checking a recording management area to determine whether the optical disc is Fully Blanked or Minimally Blanked after the recording (see Figure 1 and the discussion in paragraph [0008] regarding operation 101).

Mato, however, discloses determining that the optical disc is a Minimal Blank disc in which data is erased from the recording management area to a lead-in area and recording on a Minimal Blank disc (see the discussion in paragraph [0007]). Mato further discloses the use of packet writing on a minimally blanked optical disc (see the abstract).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of packet writing on minimally blanked optical disc as disclosed by Mato into the method of recording used in AAPA. One of ordinary skill in the art at the time the invention was made would have been motivated to combine the teachings in order to reduce the amount of time needed for the blanking process as suggested by Mato in paragraph [0009].

Motohashi discloses the claimed invention except for that recording remaining data other than the recorded data at the desired address on the optical disc, is performed prior to the erasing of data from a portion of the optical disc that may lead to a recording or read out error upon determining that the optical disc is Minimally Blanked (see the discussion in paragraphs [0008], [0009], [0018], and [0030] – [0032]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made that modifying the teachings of Motohashi to record a remainder of the data other than the recorded data, after the erasing would yield a predictable result.

Art Unit: 2627

One of ordinary skill in the art at the time the invention was made would have recognized that the modification would improve similar methods in the same way.

Additionally, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Motohashi into that of AAPA and Mato. One of ordinary skill in the art at the time the invention was made would have been motivated to combine the teachings in order to easily and correctly find the final packet of the track as suggested by Motohashi in paragraphs [0006] and [0007].

The combination of AAPA, Mato and Motohashi disclose the claimed invention including checking a recording management area to determine whether the disc is Fully Blanked or Minimally Blanked, as noted above, but fail to specifically show that a value of '04' designated at field 0 of the recording management area indicates whether the disc is Fully Blanked or Minimally Blanked.

However, it would have been obvious to one having ordinary skill in the art at the time the invention was made since one with ordinary skill could have pursued the known options of having any value in any field of the recording management area indicate whether the disc is Fully Blanked or Minimally Blanked with reasonable expectation of success.

Further, it would have been obvious through routine experimentation and optimization in the absence of criticality to have the disc indicating to be Minimally Blanked when a value '04' is designated at field 0 of the recording management area and the disc indicating to be Fully Blanked when a value '04' is not designated at the

Art Unit: 2627

field 0 of the recording management area since the applicant has not disclosed that doing so solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with the configuration disclosed by the combination of AAPA, Mato, and Motohashi.

Regarding claim 7, Motohashi further discloses wherein data ranging from a next writable address to a predetermined block is erased in said erasing (see the discussion in paragraphs [0008], [0009], [0018], and [0030] – [0032]).

Regarding claim 8, AAPA further discloses outputting an error message upon determining that the optical disc is formatted (see operation 103 in Figure 1 and the discussion in paragraph [0008]).

Regarding claim 9, Motohashi further discloses recording, after the checking step, data from a next address upon determining that the optical disc is Minimally Blanked (see the discussion in paragraphs [0008], [0009], [0018], and [0030] – [0032]).

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 2627

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LaTanya Bibbins whose telephone number is (571)270-1125. The examiner can normally be reached on Monday through Friday 7:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wayne Young can be reached on 571 272-7582. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/LaTanya Bibbins/
Examiner, Art Unit 2627

/Wayne Young/
Supervisory Patent Examiner, Art Unit 2627